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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,907	11/13/2001	Takeshi Mitsuishi	8071.0007	6647

7590 08/26/2003

Finnegan, Henderson, Farabow,
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1300 I Street, N.W.
Washington, DC 20005-3315

EXAMINER

PRITCHETT, JOSHUA L

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,907

Applicant(s)

MITSUBISHI ET AL.

Examiner

Joshua L Pritchett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-17 (as they depend from claim 1) is/are rejected.
- 7) ☒ Claim(s) 6-8 and 9-17 (as they depend from claim 6) is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

This action is in response to the Response file June 5, 2003. Applicant's arguments have been considered.

Claim Objections

Claim 17 is objected to because of the following informalities: claim 17 is a Markush claim and must therefore have the phrase "a group consisting of" following the term "from" in line 1 of the claim to be properly formatted. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Belleville.

Regarding claims 1 and 2, claims 1 and 2 are rejected for the same reasons as stated in the Previous Office Action (Paper No. 6) on page 3.

Regarding claims 3-5, Belleville teaches a composition comprising 60-90% by weight niobium oxide, 5-20% by weight zirconium oxide or 5-35% by weight yttrium oxide (col. 7 lines

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13-14). Belleville teaches that any of these oxides may be present in amounts ranging from 1-99% by weight. Therefore the amount of any one specific oxide would be anticipated by Belleville.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 9/1 and 10-14/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belleville in view of Rahilly.

Claims 9/1 and 10-14/1 are rejected for the same reasons stated in the Previous Office Action (Paper No. 9) on pages 2-3.

Claims 15-17/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belleville in view of Rahilly as applied to claims 9/1 and 12/1 above, and further in view of Asai.

Claims 15-17 are rejected for the same reasons as stated in the Previous Office Action (Paper No. 9) on pages 3-4.

Allowable Subject Matter

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Claims 6-8, 9-17/6 and 9-17/8 (as they depend from claims 6 or 8) are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 6, claim 6 is allowable over the prior art of record because the prior art fails to teach or suggest the claimed weight percent of each oxide in the composition. Belleville is sufficient to teach the weight percent of any single oxide from 1-99%, but is not sufficient to teach the claimed weight percent composition involving the three separate oxides.

Regarding claims 7-8 and 9-17/6, claims 7-8 and 9-17/6 depend either directly or indirectly from claim 6 and are therefore allowable for the same reasons as claim 6.

Response to Arguments

Applicant's arguments, see Response, filed June 5, 2003, with respect to claims 9-17 as they depend on claims 6 and 8 have been fully considered and are persuasive. The rejection of claims 9-17 as they depend from claims 6 and 8 has been withdrawn.

Applicant's arguments filed June 5, 2003 have been fully considered but they are not persuasive.

On pages 2-3, Applicant argues that Belleville is not sufficient to teach the composition of the claimed invention. Belleville states in col. 7 lines 6-16 that the material in the Belleville invention is "based on" tantalum oxide, but that "it can also include, apart from this oxide at least

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one other metal or metalloid oxide, chosen preferably from among, ... yttrium oxide (line 10) ... niobium oxide (line 12) ... zirconium oxide (line 12) ... aluminum oxide (lines 12-13) ... in a proportion for example from 1 to 99% preferably from 10 to 90 % by mass, with respect to the total mass of the metal or metalloid oxides.” Clearly the Belleville reference teaches a composition that may comprise yttrium oxide, niobium oxide, zirconium oxide and aluminum oxide. The claim limitation does not limit the composition to include only these materials, therefore the inclusion of the tantalum oxide of Belleville does not render the prior art incorrect. The claim language “comprises” is open ended and therefore the claim reads on any composition that includes the claimed materials no matter what other materials are present in the composition or in what amounts. Therefore the claim reads on the prior art of Belleville and the claim is rejected.

On page 3, Applicant argues that Belleville does not teach the use of sintering. The examiner admits that Belleville does not teach the use of sintering however the Rahilly reference does teach the use of sintering (col. 3 lines 23-28) and that teaching is used to reject the claims.

On pages 3-4, Applicant argues that Belleville and Rahilly should not be combined. The examiner disagrees because both Belleville and Rahilly deal with the creation of antireflection layers. Belleville is used to teach an antireflection composition and Rahilly is used to teach a method of preparing the composition to be placed on a substrate. More specifically both references teach an antireflective coating containing tantalum oxide (Rahilly col. 3 line 25; Belleville col. 7 lines 6-7) that would strongly suggest that the methods used to create the Rahilly antireflective layer would also work for the Belleville antireflective layer. Therefore one of ordinary skill in the art would have seen that the combination of the composition of Belleville

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and the method of Rahilly would be obvious based on the use of similar materials to construct a similar antireflective layer.

Conclusion

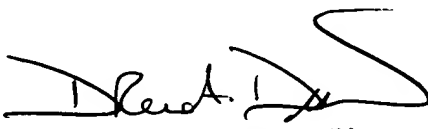
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 703-305-7917.

The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 703-305-0024. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JLP
August 25, 2003


**DREW A. DUNN
PRIMARY EXAMINER**